

Letters to the Editor

Dear Editor

NK cells in non-neoplastic lung tissue. Initial results

The importance of NK cells in the host response against tumours is known, but these cells have not been accurately studied in non-neoplastic lung tissue (1,2). The aim of this study is to evaluate the presence of NK cells in non-neoplastic lung tissue.

Twelve lung biopsies of patients with non-neoplastic disease were analysed. No patients had received previous radiation and none of them had acute inflammatory disease. Historical analysis was done in paraffin-embedded sections. Immunohistochemical stains were performed for NK cells using the monoclonal antibody IOT-10 (CD 56). The number of NK cells was counted with a MICRON image analyzer.

The total area measured for each biopsy was $447590 \mu\text{m}^2$. In this area, we deducted the alveolar air space, by digital technology. The mean area of the interstitial tissue studied was $293840 \mu\text{m}^2$ (minimum = 234413 and maximum = 362108).

In the biopsies analysed, the number of NK cells was between 2 and 13 (mean value = $1.97/100000 \mu\text{m}^2$; minimum = 0.68 and maximum = 3.59).

We conclude there are few NK cells in non-neoplastic lung tissue free from inflammatory disease.

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References

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Dear Editor

Turbuhaler or nebulizer therapy in severe COPD

I read with interest the paper by Hansen *et al.* (1). They present evidence that high dose bronchodilator therapy given by dry powder inhaler can be as effective as nebulizer therapy. This fits well with their own previous comparisons of nebulized and dry powder therapy and the paper is in agreement with studies that have shown that high dose bronchodilator therapy is equally effective whether given by nebulizer or by metered dose inhaler.

The authors are correct in stating that dry powder therapy is more convenient for the patient than nebulizer therapy but, unfortunately, it is my experience that most U.K. COPD patients with home nebulizers tend to use a combination of β -agonist and anti-cholinergic therapy.

Unfortunately, the latter cannot be given by dry powder at present (at least in the U.K.). The benefits of convenience would therefore be lost for many patients.

More importantly, the discussion contains a misleading statement that 'the costs of dry powder treatment are considerably less than the cost of domiciliary nebulizer therapy.' This statement is very inaccurate for U.K. prescribers. The present cost of terbutaline treatment is as follows: Bricanyl respirator solution 5 mg qid costs £96.00 per annum. Bricanyl respules 50mg qid would cost £267.00 per annum. Bricanyl turbuhaler 2.5 mg qid would cost £652.00 per annum.

Although the nebulizer user would have an initial cost of approximately £100.00 to purchase a compressor and some small running costs for disposable items, the dry powder treatment is either twice as expensive or six times as expensive depending on which nebulizer product is used.

A switch to dry powder treatment would not therefore be an economically attractive option for U.K. prescribers and I would be interested if the authors would give comparative costs for treatment in Denmark and in other countries where the dry powder preparation is available.

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